REMARKS

Claims 1-56 were examined and reported in the Office Action. Claims 1-5, 30-35, and 46-50 are rejected. Claims 2-6, 32-35 and 47-50 are cancelled. Claims 1, 31 and 46 are amended. New claims 57-71 are added. Claims 1, 7-31, 36-46 and 51-71 remain.

Applicant requests reconsideration of the application in view of the following remarks.

I. 35 U.S.C. §112, first paragraph

It is asserted in the Office Action that claims 1, 3-5, 31, 33-35, 46, and 48-50 are rejected under 35 U.S.C. §112, first paragraph as failing to comply with the enablement requirement. Applicant has amended the claims for clarification and to overcome the 35 U.S.C. §112, first paragraph rejection. Further, Applicant includes the following discussion to clarify Applicant's claimed invention.

Pattern matching between the images with the repetition of comparatively simple patterns, such as a fingerprint image, when comparing identical images if a little portion (a half cycle of a pattern) is moved from the superposition of maximum coincidence, two images become the superposition of minimum coincidence. On the other hand, in the comparison between different images, since a pattern and a cycle are different, even if the movement in made a little from the superposition of maximum coincidence, the degree of coincidence does not become significantly small. In other words, in the comparison between the identical images, the superposition exists in that the degree of coincidence (coincidence ratio) becomes extremely small. In the comparison between the different Images, however, the degree of coincidence does not exist.

Applicant's claimed invention uses this feature in collating, and the two images are considered to be identical when the minimum degree of coincidence (coincidence ratio) is smaller than a certain (i.e., predetermined) threshold value. The "coincidence ratio" does not express the degree that two images are in coincidence, but it expresses the ratio to the pixels of the whole image for the pixels that are in coincidence when the

two images are compared to in a certain superposition. According to the comparison by way of pattern matching, out of the two images to be compared, one image is moved perpendicularly and horizontally to be superposed, and for each of these superpositions, the "coincidence ratio" (the number of pixels in coincidence/the whole number of pixels in one scan area) is obtained. The smallest ratio among the "coincidence ratios" in the comparisons performed a plurality of times is considered to be the "minimum coincidence ratio." And, from Applicant's above-mentioned feature of pattern matching, what is meant by the indication that the "minimum coincidence ratio" is smaller than a certain threshold value is that, when these two images are compared, it turns out to become the "superposition that is extremely not in coincidence," and at this time, it is determined that the two images are identical.

For example, when the fingerprint images of the same finger are scanned, the coincidence ratios are, for example, ...70, 80, 70, 50, 25, 15, 30, 60, 75... where they become large and small in accordance with the cycle of the ridges of the fingerprint. In this example, the minimum coincidence ratio is "15." When the threshold level is set to be "20," for example, it is determined to be the collation coincidence, and it is determined to be the person himself.

On the other hand, when the fingerprints of different fingers are scanned, the coincidence ratios are, for example, ... 55, 60, 54, 55, 56, 45, 54, 50, hardly changing regardless of the cycles of the ridges of the fingerprints, the value becoming roughly around 50%. Since the minimum coincidence ratio does not reach the value below the threshold, it becomes the "collation incoincidence" and it determined not to be the person himself.

It may not have been conveyed well that a plurality of superpositions are performed, the coincidence ratio is obtained separately in each of the superpositions, and from among the "coincidence ratios," the smallest is considered to be the "minimum coincidence ratio." Given the above explanation, the questions given in the Office Action should be adequately answered and the claims should now be clearly understood.

Accordingly, withdrawal of the 35 U.S.C. §112, first paragraph rejection for claims 1, 3-5, 31, 33-35, 46, and 48-50 is respectfully requested.

II. 35 U.S.C. § 102(e)

It is asserted in the Office Action that claims 1-3 are rejected under 35 U.S.C. § 102(e), as being anticipated by U. S. Patent No. 6,094,499 issued to Nakajima et al. ("Nakajima"). Applicant respectfully traverses the aforementioned rejection for the following reasons.

According to MPEP §2131, "'[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.' (Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). 'The identical invention must be shown in as complete detail as is contained in the ... claim.' (Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)). The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, *i.e.*, identity of terminology is not required. (In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990))."

Applicant's amended claim 1 contains the limitations of "[a]n image collation apparatus comprising: an image database for recording a second image as a registered image; collation means for obtaining a plurality of coincidence ratios by collating a first image with the registered image, minimum coincidence ratio extraction means for obtaining a minimum coincidence ratio from the plurality of coincidence ratios obtained from said collation means; and determination means for determining that the first image and the registered image are identical, if the extracted minimum coincidence ratio is smaller than a predetermined threshold value."

Nakajima discloses that the pattern of an object, such as a fingerprint, is captured at a first time, then computation processing (Fourier transform) of the captured data is performed at a second time, and the degree of the coincidence with the pattern of the object registered in advance is then observed. In Nakajima the coincidence/incoincidence is determined using the largest "coincidence ratio" from

among the "coincidence ratios" in each of the superpositions, and therefore, Nakajima is significantly distinguishable from Applicant's claimed invention. Additionally, since the logic in Nakajima is completely reversed from Applicant's claimed invention, Applicant's claimed invention is not just a simple application of Nakajima, either.

In Applicant's claimed invention, the "minimum coincidence ratio" is the smallest "coincidence ratio" from among the respective "coincidence ratios" when comparisons are made by making a plurality of superpositions, and therefore, it is distinguishable from a technique that indicates the degree of incoincidence, i.e., "difference." Since the "coincidence ratio" becomes large or small depending on the superposition at the time of pattern matching of the two images, it is not the value for typically expressing the coincidence degree of the two Images. In other words, it is not the simple reversal of the logic of Nakajima.

Similarly, the above assertions similarly apply to independent claims 31 and 46.

Therefore, since Nakajima does not disclose, teach or suggest all of Applicant's amended claims 1, 31 and 46 limitations, Applicant respectfully asserts that a *prima facie* rejection under 35 U.S.C. § 102(b) has not been adequately set forth relative to Nakajima. Thus, Applicant's amended claims 1, 31 and 46 are not anticipated by Nakajima. Additionally, the claims that directly or indirectly depend on claims 1,31, and 46, namely claims 57-61, 62-66, and 67-71, respectively, are also not anticipated by Nakajima for the same reason.

Accordingly, withdrawal of the 35 U.S.C. § 102(b) rejections for claims 1, 57-61, 31, 62-66, 46 and 67-71 are respectfully requested.

CONCLUSION

In view of the foregoing, it is submitted that claims 1, 7-31, 36-46 and 51-71 patentably define the subject invention over the cited references of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes a telephone conference would be useful in moving the case forward, he is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly, extension of time fees.

PETITION FOR EXTENSION OF TIME

Per 37 C.F.R. 1.136(a) and in connection with the Office Action mailed on JULY 1, 2004, Applicant respectfully petitions the Commissioner for a one (1) month extension of time, extending the period for response to November 1, 2004. The Commissioner is hereby authorized to charge payment to Deposit Account No. 02-2666 in the amount of $110.00 to cover the petition filing fee for a 37 C.F.R. 1.17(a)(2) large entity. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR, & ZAFMAN LLP

Dated: October 29, 2004

By: _____

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail with sufficient postage in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, Virginia 22313-1450 on October 29, 2004.

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Jean Svoboda